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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,723	11/07/2005	Andreas Smolarek	HEU-003US	2043
	7590 08/10/200 OCKFIELD, LLP	9	EXAMINER	
FLOOR 30, SU	ЛТЕ 3000		ALIE, GHASSEM	
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,			3724	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/555,723	SMOLAREK, ANDREAS
Office Action Summary	Examiner	Art Unit
·	GHASSEM ALIE	3724
The MAILING DATE of this communication app		
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO a, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on <u>04/3</u> 2a) This action is FINAL . 2b) This 3) Since this application is in condition for alloware closed in accordance with the practice under <u>B</u>	s action is non-final. nce except for formal mat	
Disposition of Claims		
4) ☐ Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) 1 and 11-16 is/are w 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 2-10 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	ithdrawn from considerati	on.
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on <u>07 November 2005</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11.	are: a)⊠ accepted or b)☐ drawing(s) be held in abeya tion is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in a writy documents have been u (PCT Rule 17.2(a)).	Application No n received in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 06/25/09.	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application

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Claim Objections

1. Claim 2 is objected to because of the following informalities: "and said fixing means and a unit comprising said corresponding said mandrel" should be --and said fixing means; and a unit comprising said corresponding said mandrel--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 2-8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hahnel et al. US 2004/0011842, hereafter Hahnel. With respect to claim 2, Hahnel discloses a device configured to perform breaking separation of at least one bearing cap (4) from a corresponding thrust block in a bearing assembly an engine case provided with bearing bores (6) arranged in-line (along axis A), comprising an extension mandrel (18) insertable into at least one of said bearing bores (see figure 1) and said extension mandrel has two half-mandrels(18.2, 18.4), an expander (26) for moving said half-mandrels apart, said expander taking effect between said half-mandrels, at least two gripping means (14; there are 6), said gripping means being couple-able to said half-mandrel (see figure 1) corresponding to said at least one bearing cap, and a fixing means (16) connected to said at least two gripping means, wherein said at least one bearing cap being clampable between said corresponding half-mandrel and said fixing means and a unit comprising said corresponding half-mandrel, said gripping means, said fixing means and said clamped bearing cap is supported in a freely

movable manner to a limited degree, though secured against rotation, in the direction of breaking separation.

With respect to claim 3, Hahnel discloses the device wherein said half-mandrel corresponding to said bearing cap comprises at least one recess (section 22 forms a recess) engageable with said gripping means (14).

With respect to claim 4, Hahnel discloses the device wherein said half-mandrel corresponding to said bearing cap comprises, at its periphery on mutually facing sides, tangentially extending insertion slots (gaps formed between sections 24) for said gripping means, said slots being in communication with said at least one recess (the slots are "in communication" with the recess for actuator 26 because they are mounted on the same device)..

With respect to claim 5, Hahnel discloses the device wherein at least one recess (the final space after the furthest left raised section 24 on figure 2; between 20 and 24), when viewed in an axial direction of said extension mandrel, is positioned axially adjacent to insertion slots (any of the sections 22 can be viewed as slots as they are in between raised portions 24) in each case and merges into said slots.

With respect to claim 6, Hahnel discloses the device wherein said gripping means (14) are formed by a first and a second pincer (any of the gripping points can be considered "pincers"), each of the first and second pincers comprise fixed jaws (the jaws encircle the mandrel; see figure 1), said jaws having, at their ends, engagement members facing towards one another.

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With respect to claim 7, Hahnel discloses the device wherein said engagement members engage with at least one recess (flat portion 22 on mandrel 18; see figure 2) within said half mandrel corresponding to said bearing.

With respect to claim 8, Hahnel discloses the device wherein said fixing means (16) connected to said gripping means comprises at least one force-actuated detent (contact point is considered a detent as it holds the bearing cap in place).

With respect to claim 10, Hahnel discloses the device wherein the engine case comprises a crankshaft case for a reciprocating piston engine. The workpiece (housing block 2 is the engine case and has the crankshaft case which is for a piston engine).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hahnel in view of any of Hahnel et al. (US 6,457,621), Hase (US 2002/0023939), or Knoll et al. (US 2002/0104864; as cited in IDS). Hahnel discloses the device of claim 8 but does not specifically disclose the setup of the gripping means (it is noted that Hanhel does not disclose a view looking through the bearing caps so it is hard to tell what the structure of the gripping means actually comprises). Hanhel does disclose the gripping means being a detent acting upon said bearing cap, but does not disclose at least two detents being spaced apart from one another, said detents acting upon said bearing cap at the side which is opposite said

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corresponding half-mandrel. Examiner notes that in the case of bearing cap breakers, the gripping means typically comprises two detents to secure the top of the bearing cap prior to breaking. The prior art references of Knoll et al. (figure 2), Hase (figures 1 and 5), and Hahnel et al. (figure 1) all disclose the claimed setup of the gripping means in relation to a bearing cap. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Hahnel to have the gripper means comprise two detents per bearing case in view of the device of Knoll et al., Hase, or Hahnel et al. in order to grip the top of the bearing case. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Response to Arguments

6. Applicant's arguments filed on 04/30/09 have been fully considered but they are not persuasive. Applicant argument that workpiece countermounts14 in Hahnel cannot be considered as gripping means since they do not grip the half-mandrel 18 is not persuasive. Firstly, claim 2 does not call for gripping means to grip the half-mandrel. In fact, claim 2, merely recites, "at least tow gripping means, said gripping means being couplable to said half-mandrel." Secondly, claim 2 does not call for specific griping means. In other words, the specific structure of the gripping means has not been claimed. In this case, any member or part such as the workpiecec countermount 14 that supports, holds or grasps the half-mandrel 18 is considered to be gripping means, since it grips and holds the half-mandrel. In addition, the gripping means 14 are clearly couplable to the half-mandrel, since they are coupled to the

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half-mandrel. Applicant's argument that the half-mandrel (18) may lift-off from the machine such it is not secured against rotation is not persuasive. Firstly, claim 2 does not call for a half-mandrel that is not separated from the machine or lifted. Claim 2 merely recites, "a unit comprising said corresponding half-mandrel, said gripping means, said fixing means and said clamping bearing cap is supported in a freely movable manner to a limited degree, though secured against rotation, in the direction of breaking separation." In this case, the halfmandrel at least does not rotate since it expands against the bearing cap and does not rotate during breaking separation. In addition, claim 2, does not recite in what conditions the halfmandrel does not rotate. Claim 2 does not requires that the half-mandrel, clamped bearing, gripping means and fixing means as a unit do not rotate "during breaking separation." Furthermore, applicant fails to state how the half-mandrel, clamped bearing, gripping means and fixing means as a unit in Hahnel rotates in the direction of breaking separation or during breaking separation. The half-mandrel, clamped bearing, gripping means and fixing means are all tied together and do not rotate as a unit in the direction of breaking separation or during breaking separation.

Conclusion

7. **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ghassem Alie/

Primary Examiner, Art Unit 3724

August 6, 2009